

A KERMADEC ISLANDS CONUS (MOLLUSCA: GASTROPODA) FOUND LIVING IN NORTHERN NEW ZEALAND WATERS

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Abstract. Records of *Conus* spp. in New Zealand are given, including authentic recent records of living specimens.

The genus *Conus* is seldom found outside of tropical and subtropical waters, and until now there was no authentic record of a species of that genus, actually found living, in situ, in New Zealand waters.

Discounting records from early general works on conchology, in which some thirteen species of common Indo-Pacific cones were credited, undoubtedly erroneously, as occurring also in New Zealand, we are left with only three authentic New Zealand records.

- (1) *Conus marmoreus* Linnaeus, 1758. A half-grown well preserved example, said to have been picked up alive at Farewell Spit, Cook Strait, by a lighthouse keeper, early in 1917 (Mestayer 1918: 102).

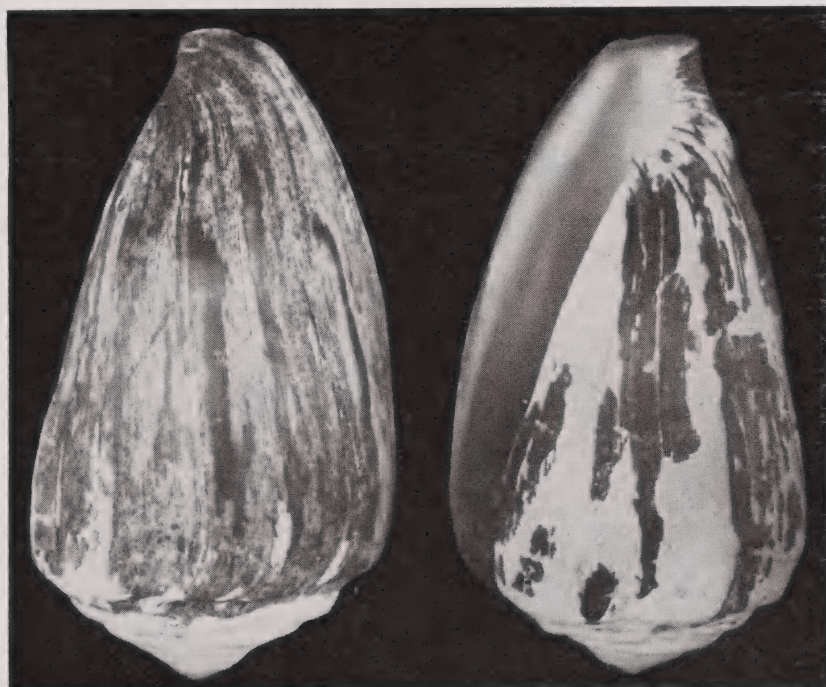


Fig. 1. *Conus kermadecensis* Iredale, Parengarenga Hbr.

- (2) *Conus* sp. A small very imperfect empty shell, in too poor condition for specific determination, was obtained by dredging in 440 fathoms north of the Three Kings Islands. The shell bears some resemblance to *Conus (Kermadecella) raoulensis* Powell, 1958 (Powell 1958:83, Crozier 1966:48).
- (3) *Conus kermadecensis* Iredale, 1912. A single extra large example of this species (Fig. 1) was found living on a low-tidal sandbank at the entrance to the Te Kao Channel, Parengarenga Harbour, Northland by Mrs M. E. Armiger, January, 1972.

Subsequent visits to the Te Kao sandbank by Mrs Armiger and several members of the Auckland Museum Conchology Section have not resulted in the finding of further examples of this Kermadec cone.

The Te Kao specimen could owe its presence there to an earlier chance spat fall, possibly dating back to the time of the temporary invasion of east coast Northland localities by the large Indo-Pacific swimming crab, *Scylla serrata* (Forsk., 1775). The localities and dates for these crab occurrences are — Takou Estuary, south of Whangaroa, 1962-1964; Price's Point, Awanui Harbour, May 15th 1964; Te Kao Landing, Parengarenga Harbour, April, 1964; Russell Wharf, Bay of Islands, Cooper's Beach and Tokerau Beach, Doubtless Bay, 1964 (Dell 1964: 60). Since then there have been no further records of this crab in New Zealand waters.

Time alone will decide if the *Conus kermadecensis* record is just a chance occurrence, or if another species has been added to our fauna.

***Conus kermadecensis* Iredale, 1912**

1912 *Conus kermadecensis* Iredale, Proc. Malac. Soc., Lond. 10: 227, pl. 9, figs. 15, 16.

1915 *Conus kermadecensis* Iredale, Oliver, Trans. Proc. N.Z. Inst. 47: 541.

Records: Sunday Island, Kermadec Islands (type). Meyer Island, Kermadec Islands, living on rocks just below low-water mark (Oliver). New Zealand, low tide on sandbank, entrance to Te Kao Channel, Parengarenga Harbour (Mrs M. E. Armiger, January, 1972).

The Parengarenga specimen is in the collection of Mrs Armiger of Whangarei. It is a fully grown shell, larger than the holotype or any example subsequently known, but unmistakably *kermadecensis*. Although the dark olive-brown periostracum is largely weathered away, and the exposed shell surface eroded, traces of the characteristic coloration, which is orange, with a broad median band of white, still remain near the inner-lip. The interior of the aperture is pale bluish. Although the Parengarenga shell was taken alive, the animal became so retracted after preservation that it could not be removed for examination without damage to the shell.

Height 74.5 mm, width 41.0 mm. Parengarenga Harbour.

Height 55.0 mm, width 29.0 mm. Holotype. Sunday Island, Kermadecs.

Height 47.0 mm, width 26.5 mm. Meyer Island, Kermadecs.

NOTE

Since the above was written a small colony of five individuals was observed at low tide, on *Zostera*, less than a mile north of the Te Kao sandbank, in late March, 1972. The finder, Master A. Wilson, of Whangarei, generously donated one of the specimens to the Auckland Museum. It is a three-quarters grown example (33 mm x 21 mm), in perfect condition, with the periostracum intact. The question arises — is this immature example the result of a subsequent spatfall, or is the species now breeding in the area?

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